## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE REVISED

## PERMITTEE

Plote Construction, Inc. Attn: Mr. Daniel Plote 1100 Brandt Drive Elgin, Illinois 60120

Application No.: 89020062 I.D. No.: 031063AAJ

Applicant's Designation: DRUM MIX Date Received: August 26, 2002

Subject: Asphalt Plant and Crushing Plant

Date Issued: October 25, 2002 Expiration Date: September 7, 2005

Location: 254 Old Higgins Road, Des Plaines

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of one natural gas-fired, drum-mix asphalt plant with baghouse, four 30,000 gallon liquid asphalt storage tanks, and one crushing plant with water spray bars pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., volatile organic material (VOM) less than 25 tons per year and carbon monoxide (CO) less than 100 tons per year). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. This asphalt plant is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and I. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA and under a delegation agreement.
- b. The emissions from the asphalt plant shall not contain particulate matter (PM) in excess of 0.04 gr/dscf and shall not exhibit 20% opacity or greater, pursuant to the NSPS, 40 CFR 60.92.
- c. At all times the Permittee shall maintain and operate the asphalt plant, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).

- 3a. The crushing plant is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and OOO. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Fugitive emissions of PM from the crushers (except from truck dumping) shall not exceed 15 percent opacity, (40 CFR 60.672(c) and (d)).
- c. Fugitive emissions of PM from the screens (except from truck dumping) and conveyors shall not exceed 10 percent opacity (40 CFR 60.672(b) and (d)).
- d. At all times the Permittee shall maintain and operate the crushing plant, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).
- 4a. Emissions and operation of the asphalt plant shall not exceed the following limits:

	Asphalt	Concrete	Production	ı
(Tons/Month	<u>1)</u>			(Tons/Year)
160,000				800 <b>,</b> 000

	Emission Factor	Emissions		
<u>Pollutant</u>	(Lb/Ton)	(Tons/Month)	(Tons/Year)	
		0 5	10.0	
PM	0.033	2.7	13.2	
$NO_x$	0.026	2.1	10.4	
CO	0.130	10.4	52.0	
VOM	0.032	2.6	12.8	
$SO_2$	0.0034	0.3	1.4	
	Totals	18.1	89.8	

These limits are based on maximum asphalt production and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. This permit is issued based on negligible emissions of VOM from the 4 liquid asphalt storage tanks. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- c. Emissions and operation of the asphalt tank heater shall not exceed the following limits:

	Natural	Gas	Usage	
(mmscf/Month)				(mmscf/Year)
2.1				10.3

	Emission Factors	Emissions		
<u>Pollutant</u>	(Lb/mmscf)	(Tons/Month)	(Tons/Year)	
$NO_x$	100	0.05	0.52	
CO	84	0.05	0.44	

These limits are based on maximum natural gas usage and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

d. Emissions and operation of the crushing plant shall not exceed the following limits:

	Aggregate	Throughput	
(Tons/Month)			(Tons/Year)
100,000			470,000

	Emission Factor	PM Emissions		
Equipment	(Lb/Ton)	(Tons/Month)	(Tons/Year)	
3 Crushers	0.0012	0.18	0.85	
4 Screens	0.0018	0.36	1.70	
12 Conveyors	0.0001	0.06	0.29	
	Totals	0.60	2.84	

These limits are based on maximum aggregate throughput and controlled, AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 5. The Permittee shall maintain records of the following items:
  - a. Asphalt Concrete production (tons/month and tons/year); and
  - b. Aggregate throughput (tons/month and tons/year).
- 6. The Permittee shall maintain an operating and maintenance log for the dryer control system, including:
  - a. Incidents of malfunction, with date, duration, description, probable cause, and corrective actions, pursuant to 40 CFR 60.7(b), and
  - b. Maintenance activities, with date and description of inspections, repair actions, and equipment replacements, etc.

This log shall be available for inspection and copying by the Illinois  $\ensuremath{\mathtt{EPA}}$ 

7. Within 90 days of a written request from the Illinois EPA, pursuant to 35 Ill. Adm. Code Section 201.282, the emissions and opacity from the asphalt plant shall be measured during conditions which are

- representative of the maximum performance. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
- 8a. This permit is issued on the condition that, within 180 days of the issue date of this permit, the opacity from the affected facilities (the 6 conveyors to be added) shall be measured during conditions which are representative of the maximum performance.
- b. i. The following methods and procedures shall be used for opacity measurements.

USEPA Method 9, 40 CFR 60 Appendix A

- ii. A test shall consist of 30 sets of 24 consecutive observations.
- c. Opacity measurements shall be performed by a certified observer.
- d. The Illinois EPA shall be notified prior to these measurements to enable the Illinois EPA to observe these measurements. Notification of the expected date of the measurements shall be submitted to a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of measurement shall be submitted a minimum of five (5) working days prior to the actual date of the measurement. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the measurements.
- 9. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
- 10. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 11. The transportation and reassembly of a portable plant at a new location requires a new construction and operating permit, pursuant to 35 Ill. Adm. Code 201.142 and 201.143. This permit must be obtained  $\underline{\text{prior}}$  to reassembling the plant at the new location.
- 12. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the

- emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 13. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 14. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 15. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

<u>and</u> one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

- 16. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
  - a. Asphalt concrete production (tons/year); and
  - b. Aggregate throughput (tons/year).

It should be noted that this permit has been revised to update the asphalt plant and natural gas combustion emission factors, increase the number of conveyors from 6 to 12 (with opacity testing requirements), make other corrections in the equipment list (add 4 screens previously omitted, specify liquid asphalt tanks sizes), and update to the current FESOP format.

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If you have any questions on this, please call Jim Kallmeyer at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JDK:psj

cc: Illinois EPA, FOS Region 1

Illinois EPA, Compliance Section

Lotus Notes

## Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the asphalt plant and crushing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM and 100 tons per year of CO at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1a. Emissions and operation of the asphalt plant shall not exceed the following limits:

	Asphalt	Concrete	Production	1
(Tons/Month	<u>1)</u>			(Tons/Year)
160,000				800,000

	Emission Factor	Emissions		
<u>Pollutant</u>	(Lb/Ton)	(Tons/Month)	(Tons/Year)	
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	Natural	Gas	Usage	
(mmscf/Month)				(mmscf/Year)
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	Emission Factors	Emiss	sions
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d. Emissions and operation of the crushing plant shall not exceed the following limits:

(Tons/Month)	Aggregate	Throughput	(Tons/Year)
(10118/11011611/			(10115) 1041)
100,000			470,000

	Emission Factor	PM Emi	ssions
<u>Equipment</u>	(Lb/Ton)	(Tons/Month)	(Tons/Year)
3 Crushers	0.0012	0.18	0.85
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